

"Meeting
The
Challenge"



Restructuring the EM Portfolio

A new permanent way of doing business...
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March 9, 2010

Pre-ARRA Portfolio Structure





- EM Project Baseline Summaries (PBS)
 - DOE O 413.3A applied to the PBS
 - All-inclusive scope → "kitchen sink"
 - Prolonged durations → NTB and OPER
 - Budget-driven → annual shortfalls
 - Struggling construction projects "tax" other PBSfunded work
 - Capital work performance masked by LOE work
 - Perception of progress with "no completion"

ARRA Challenges and Opportunity





- How do we save and create jobs quickly?
- How do we maneuver through our Project Management Systems?
- How do we get definite and discrete work completed by September 30, 2011 within cost, schedule, safety, contractual and personnel constraints?

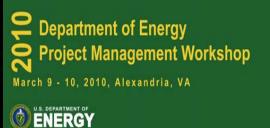
TASKS





- Breakup the PBS
- Differentiate Programs, Projects and Activities (PPAs) from each other
- Apply DOE O 413.3A requirements
 - Capital asset projects (≥ \$10 million)
- Apply DOE O 413.3A principles
 - General plant projects (< \$10 million)
 - Operations activities and programs
- Deliver project completions

New ARRA Portfolio Structure



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Construction
Projects
(TPC ≥ \$10 million)

Cleanup
Projects
(TPC ≥ \$10 million)

Operations Activities and **Programs** Programs, **Operations** Landlord **Activities** Activities, and Site Services, etc. **Construction and Cleanup General Plant Projects** (TPC < \$10 million)

Re-Organizing EM PPAs



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CAPITAL ASSET PROJECTS

Projects

- Line item construction projects
- Minor new construction projects* with total project cost (TPC**) of \$10 million*** or more.
- * Refer to DOE Order 430.1B, Change 1, Real Property Asset Management, for definitions of alterations and betterment
- ** DOE Manual 135.11A, Change 1,
 Department of Energy
 Budget Execution-Funds
 Distribution and Control
 Manual, specifies total
 estimated cost (TEC).
 EM will utilize TPC as
 the cost determinant.
- *** Congress raised the cost threshold for General Plant Projects (GPP) and Institutional GPP from \$5 million to \$10 million in Omnibus Appropriations Act of 2009 (H.R. 1105).

TPC of \$10 million or more

- Surface and subsurface soil remediation such as construction of caps and engineered cover systems; excavation of contaminated soils and waste materials; and in situ grouting
- Surface water and groundwater remediation such as construction of treatment units; installation of sampling, monitoring and sentry wells; installation of barrier systems; and construction of phytoremediation systems
- Retrieval of transuranic or other solid waste from earthen-covered storage below grade
- Removal or closure of radioactive liquid waste or high level waste tanks following waste retrieval operations
- Nuclear facility decommissioning
- Non-nuclear facility demolition and removal

OPERATIONS ACTIVITIES & PROGRAMS

- Stabilization, packaging, storage, transportation, and disposition of: (1) solid waste, including transuranic waste; (2) liquid waste, including high level waste and radioactive tank waste; and (3) nuclear materials, including special nuclear materials and spent nuclear fuel
- Retrieval of transuranic or other solid waste from earthen-covered storage above grade
- Operation of facilities for receipt and retrieval of high-level waste
- Operation of waste processing facilities
- Surveillances, nondestructive and destructive inspections, and other stewardship activities of nuclear materials
- Emergency removal actions
- Cleanup activities with TPC less than \$10 million

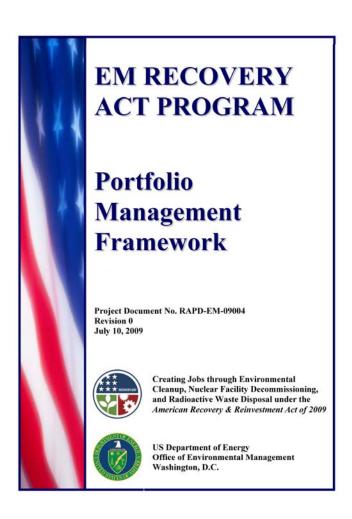
- Site/facility
 investigation,
 characterization,
 sampling and analysis,
 alternatives evaluation,
 and other activities
 leading up to the final
 approved cleanup
 decision document
- Operation of environmental remediation systems such as groundwater treatment systems
- Post-construction and post-closure care of remediated land burial sites
- Long-term
 environmental
 stewardship including
 environmental
 monitoring and
 institutional controls
- Facility shutdown and deactivation activities in preparation for final decommissioning

- General Plant Projects and Institutional General Plant Projects
- Alterations and Betterments
- Maintenance and Repair
- Landlord activities and site services
- Safeguards and security
- Emergency management
- Land management
- Fleet management
- Technology research, development, demonstration and deployment
- Community-support grants
- Public outreach and regulator oversight grants
- Preservation of cultural resources
- Program management

Codification







- Issued July 15, 2009
- EM Recovery Act Program (EMRAP)
 - Capital asset activities
 - CAPs → PARS Reportable
 - GPPs
 - Operations
 - Programs
- Basis for updated EM Protocol

Implement EMRAP Portfolio Framework



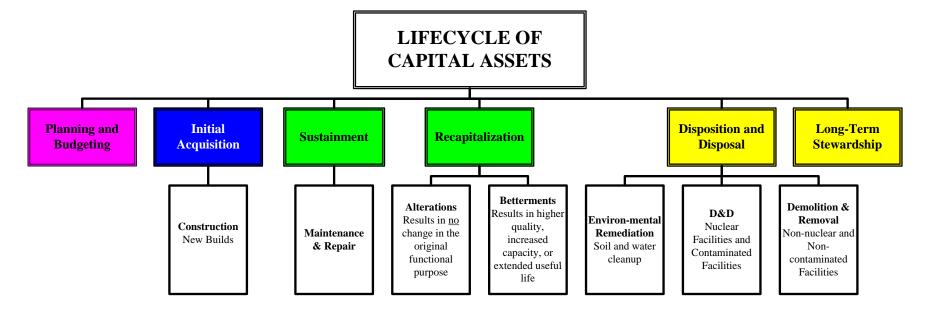
- Systematically decompose the work
 - Define and differentiate capital asset projects from "everything else"
 - Take a lifecycle approach
 - Focus on the WORK
- Federal and Contractor buy-in
 - Significant undertaking
- Paradigm shift

Typical Lifecycle of Capital Assets



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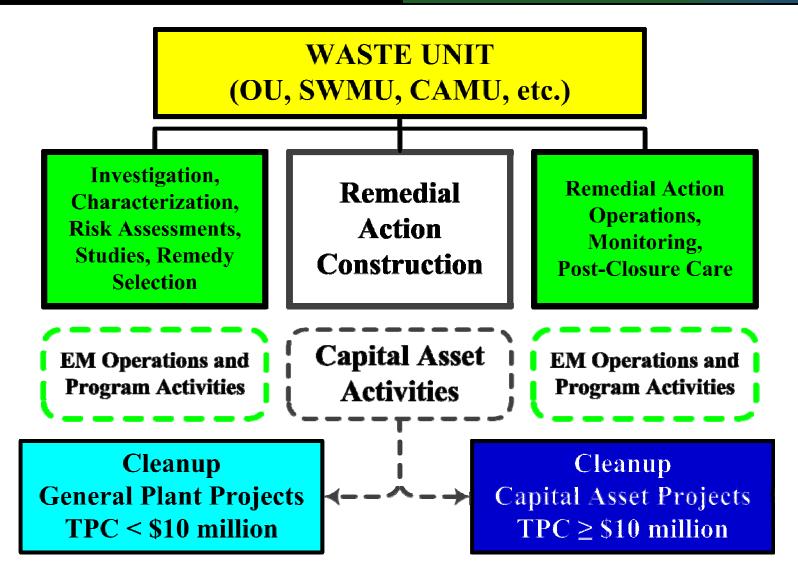
Construction, recapitalization, environmental remediation, nuclear facility decontamination & decommissioning, and non-nuclear facility demolition and removal with a total project cost of \$10 million or more are executed as capital asset projects in accordance with DOE O 413.3A.

Remediation Scenario



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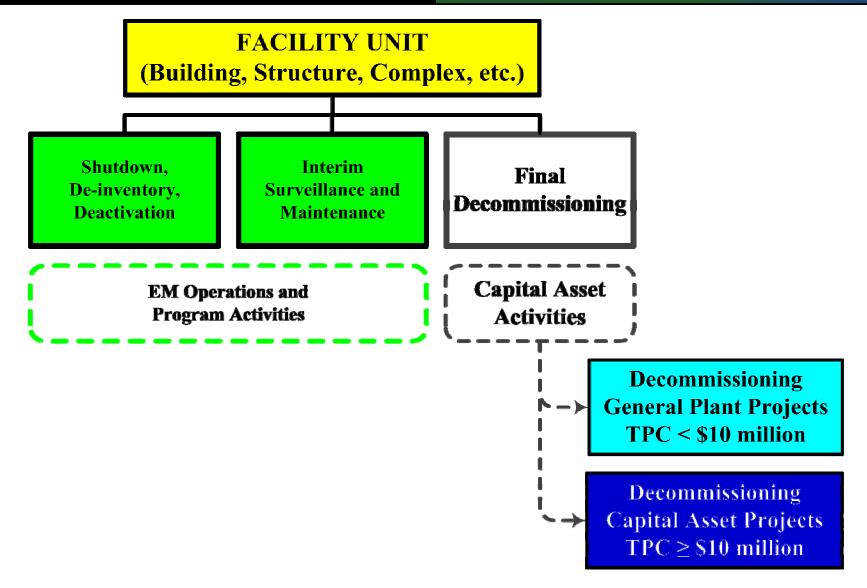


Deactivation & Decommissioning Scenario



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Site Scenario





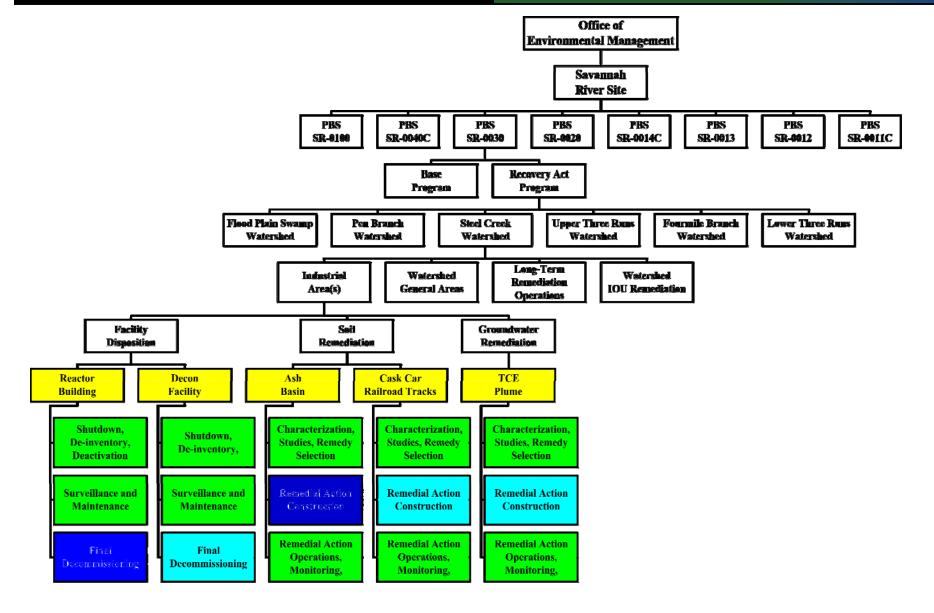
- Savannah River Recovery Act Program
 - PBSs SR-0013, -0030 and -0040C entirely funded by ARRA
 - Full suite of PPAs
 - \$1.6 billion over 2-1/2 years on 7 projects
- EIR and IPR findings under traditional PBS approach
 - Unclear scope definition, cost, and schedule estimates
 - Long period between definition, execution, completion
 - Corrective Action Plans developed and implemented
 - Post Framework results
 - 6 Capital Asset Projects, TPC \$378M
 - 49 GPPs \$210M
 - OA \$1.028M

SRS Diagram

Department of Energy
Project Management Workshop

March 9 - 10, 2010, Alexandria, VA





Benefits of Proper Work Classification

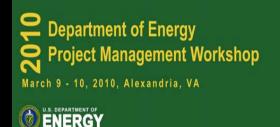






- Clearer scope definition (Smaller, discrete work efforts)
- Postured for success (CAP and GPP completions)
- Portfolio flexibility (Prioritize PPAs, funding nimbleness)
- Smart investment of ARRA funds
- Better control of risk assessment and opportunities
- FPD Oversight at the appropriate level
- Span of control: Smaller projects are better managed
- Improved communications/expectations (Stakeholders, Contractor Partners)

Way Ahead



- Evaluate ALL PBS across complex for proper work classification (~71 PBSs, \$6B/yr plus \$6B ARRA over 3 yrs)
- Evaluate life cycle estimates and environmental liability
- Prioritize acquisition financial and personal resources
- Codify and reinforce permanent transition